AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously Presented): A method of dehydrogenating triisopropyl benzene in a vapor phase at an elevated temperature in the presence of steam and a solid catalyst to produce diisopropyl isopropenyl benzene, isopropyl diisopropenyl benzene and/or triisopropenyl benzene, characterized in that said solid catalyst is mainly composed of an iron compound and a potassium compound and does not contain chromium as a catalyst component, and the feed amount of the steam which is fed together with the raw material triisopropyl benzene is between 10 and 60 times in weight ratio as large as the feed amount of the triisopropyl benzene.

Claim 2 (Original): The method according to claim 1, wherein triisopropyl benzene is 1,3,5-triisopropyl benzene.

Claim 3 (Previously Presented): The method according to claim 1, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

Claim 4 (Previously Presented): The method according to claim 1, characterized in that the solid catalyst further comprises at least one compound selected from the group consisting of alkali metal compounds other than the potassium compound, alkaline earth metal compounds, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

Claim 5 (Previously Presented): The method according to claim 1, wherein the temperature of the dehydrogenation reaction is between 480 and 650 °C.

Claim 6 (Canceled).

Claim 7 (Previously Presented): The method according to claim 1, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.4 on LHSV.

Claim 8 (Previously Presented): The method according to claim 1, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.0 on LHSV.

Claim 9 (Previously Presented): A method of dehydrogenating triisopropyl benzene in a vapor phase at an elevated temperature in the presence of steam and a solid catalyst to produce diisopropyl isopropenyl benzene, isopropyl diisopropenyl benzene and/or triisopropenyl benzene,

characterized in that said solid catalyst is mainly composed of an iron compound and a potassium compound and does not contain chromium as a catalyst component,

and in that a combination of a reaction period and a catalyst regeneration period is made by feeding triisopropyl benzene intermittently,

in said reaction period, two components of the triisopropyl benzene and the steam contacting with the solid catalyst, the feed amount of the steam which is fed together with the raw material triisopropyl benzene being between 10 and 60 times in weight ratio as large as the feed amount of the triisopropyl benzene, and

in said catalyst regeneration period, only steam, oxygen or air contacting with the solid catalyst.

Claim 10 (Canceled).

Claim 11 (Canceled).

Claim 12 (Previously Presented): The method according to claim 9, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.4 in liquid hourly space velocity LHSV.

Claim 13 (Previously Presented): The method according to claim 9, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.0 in liquid hourly space velocity LHSV.

Claim 14 (Previously Presented): The method according to claim 9, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

Claim 15 (Previously Presented): The method according to claim 9, wherein triisopropyl benzene is 1,3,5-triisopropyl benzene.

Claim 16 (Previously Presented): The method according to claim 9, characterized in that the solid catalyst further comprises at least one compound selected from the group consisting of alkali metal compounds other than the potassium compound, alkaline earth metal compounds, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

Claim 17 (Previously Presented): A method of dehydrogenating diisopropyl benzene in a vapor phase at an elevated temperature in the presence of steam and a solid catalyst to produce isopropenyl cumene and diisopropenyl benzene,characterized in that

said solid catalyst is mainly composed of an iron compound and potassium compound and does not contain chromium as a catalyst component,

and in that a combination of a reaction period and a catalyst regeneration period is made by feeding diisopropyl benzene intermittently,

in said reaction period, two components of the diisopropyl benzene and the steam contacting with the solid catalyst, the feed amount of the steam which is fed together with the raw material diisopropyl benzene being between 3 and 60 times in weight ratio as large as the feed amount of the diisopropyl benzene, and

in said catalyst regeneration period, only steam, oxygen or air contacting with the solid catalyst.

Claim 18 (Canceled).

Claim 19 (Canceled).

Claim 20 (Previously Presented): The method according to claim 17, wherein the feed amount of the diisopropyl benzene is between 0.01 and 1.4 in liquid hourly space velocity LHSV.

Claim 21 (Previously Presented): The method according to claim 17, wherein the feed amount of the diisopropyl benzene is between 0.1 and 1.0 in liquid hourly space velocity LHSV.

Claim 22 (Previously Presented): The method according to claim 17, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

Claim 23 (Previously Presented): The method according to claim 17, wherein diisopropyl benzene is meta-diisopropyl benzene, and isopropenyl cumene and diisopropenyl benzene are meta-isopropenyl cumene and meta-diisopropenyl benzene, respectively.

Claim 24 (Previously Presented): The method according to claim 17, wherein diisopropyl benzene is para-diisopropyl benzene, and isopropenyl cumene and diisopropenyl benzene are para-isopropenyl cumene and para-diisopropenyl benzene, respectively.

Claim 25 (Previously Presented): The method according to claim 17, characterized in that the solid catalyst further comprises at least one compound selected from the group consisting of alkali metal compounds other than the potassium compound, alkaline earth

metal compounds, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

Claim 26 (Previously Presented): The method according to claim 3, characterized in that the solid catalyst further comprises at least one compound selected from the group consisting of alkali metal compounds other than the potassium compound, alkaline earth metal compounds other than the magnesium compound, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

Claim 27 (Previously Presented): The method according to claim 4, wherein the temperature of the dehydrogenation reaction is between 480 and 650 °C.

Claim 28 (Canceled).

Claim 29 (Canceled).

Claim 30 (Canceled).

Claim 31 (Canceled).

Claim 32 (Canceled).

Claim 33 (Previously Presented): The method according to claim 13, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

Claim 34 (Previously Presented): The method according to claim 32, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

Claim 35 (Previously Presented): The method according to claim 14, characterized in that the solid catalyst further comprises at least one compound selected from the group consisting of alkali metal compounds other than the potassium compound, alkaline earth metal compounds other than the magnesium compound, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

Claim 36 (Canceled).

Claim 37 (Canceled).

Claim 38 (Previously Presented): The method according to claim 20, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

Claim 39 (Previously Presented): The method according to claim 36, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

Claim 40 (Previously Presented): The method according to claim 22, wherein diisopropyl benzene is meta-diisopropyl benzene, and isopropenyl cumene and diisopropenyl benzene are meta-isopropenyl cumene and meta-diisopropenyl benzene, respectively.

Claim 41 (Previously Presented): The method according to claim 22, wherein diisopropyl benzene is para-diisopropyl benzene, and isopropenyl cumene and diisopropenyl benzene are para-isopropenyl cumene and para-diisopropenyl benzene, respectively.

Claim 42 (Previously Presented): The method according to claim 22, characterized in that the solid catalyst further comprises at least one compound selected from the group consisting of alkali metal compounds other than the potassium compound, alkaline earth

metal compounds other than the magnesium compound, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.